

SEMICONDUCTOR ARTICLE HARMONIC IDENTIFICATION

ABSTRACT OF THE DISCLOSURE

An harmonic intermodulation article identification system comprises a scanning dipole antenna response to an RF intermodulation harmonic product radiated from RF diodes carried by or embedded in a substrate. The product signature is applied to a spectrum analyzer that outputs a signature identification to a comparator. In response to receiving a signature identification, the comparator scans previously stored signature identifications for a match. A match indicates the received product identification from the analyzer defined a specific substrate such as a document or product tag. A match by the comparator outputs a signal to a display that indicates the identification of a substrate carrying RF diodes generating the compared product identification.